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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/205,119	12/03/1998	CHARLES A. ELDERING	8887-3004	8185

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EXPANSE NETWORKS, INC.
6206 KELLERS CHURCH ROAD
PIPERSVILLE, PA 18947

EXAMINER

LONSBERRY, HUNTER B

ART UNIT PAPER NUMBER

2611

19

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/205,119

Applicant(s)

ELDERING ET AL.

Examiner

Hunter B. Lonsberry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42,44-46,48-60 and 62-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42,44-46,48-60 and 62-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 17.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 11/6/2003 have been fully considered but they are not persuasive.

1) Applicant argues the '978 patent "... utilizes heuristic rules to associate subscriber interactions to non-interaction traits (demographics characteristics) is erroneous." (Page 13) and that the use of heuristic rules in Alexander is not inherent (Page 14).

Regarding applicants argument 1, Tuzhilin discloses the use of "fuzzy rules" in order to determine the types of purchases a user may make based on a number of known subscriber characteristics. The term "fuzzy" means that a yes or no (0 or 1) value is not used, but rather a wider set of values may be used to describe a degree of truth, for example "The statement, *today is sunny*, might be 100% true if there are no clouds, 80% true if there are a few clouds, 50% true if it's hazy and 0% true if it rains all day." (http://www.webopedia.com/TERM/f/fuzzy_logic.html).

<http://dictionary.reference.com/search?q=demographic> defines demographic as "n : a statistic characterizing human populations (or segments of human populations broken down by age or sex or income etc.)" Tuzhilin discloses the rule "(IF Sex="Male" and Shopping_time="evening" and Day_of_week="weekday" and Purchase="Diapers" THEN Purchase="beer".)", which is applied to men. As Tuzhilin discloses that this rule is applied to men, it is disclosing a demographic trait, in this case, describing male purchasing behaviour.

Alexander discloses a viewer profiling system which monitors a users viewing habits and internet browsing, and is able to determine demographics regarding a user, such as a users martial status, number of children, political affiliations, age, and other characteristics regarding a user's buying habits such as interest in buying a car or appliance; characteristics may be determined regarding a specific user, if a user is not utilizing a specific remote or PIN, or a more general "family" profile may be determined (column 28, line 13-67, column 30, line 1-44). As Alexander discloses the that the EPG may determine a users favourite team (age, martial status), based off the games (programs, web surfing habits) a user watches (column 29, lines 56-67), Alexander must use some type of heuristic like rule, as the EPG believes that this is a user's favourite team, even though a user has not confirmed it, by entering the information. The combination of Davis, Tuzhilin and Alexander, all three of which are viewer profiling systems, would result in a system which uses heuristic rules to determine demographic characteristics of a user, based off of a user's interactions with an EPG and the world wide web.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 42, 44-46, and 48--73 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,796,952 to Davis in view of U.S. Patent 6,236,978 to Tuzhilin and U.S. Patent 6,177,931 to Alexander.

Regarding claims 42, 44-46, 48, 49, 52, 60-61, 66 and 71-74, Davis discloses a user monitoring system which monitors a users interactions with a web page and advertising as well as a user's inactivity on the webpage via timer to account for a user reading the webpage, this information is stored in a database and builds a profile based upon subscriber interactions (column 8, lines 30-column 9, line 45, column 11, lines 13-33, column 12, line 51- column 13, line 18, lines 47-63). Davis does not disclose identifying subscriber demographics derived from heuristic rules, which process subscriber interactions. Tuzhilin discloses a system which utilizes a number heuristic rules to create a dynamic consumer profile, which tracks user interactions and traits; the system then estimates a users future needs as well as which products a user is most likely to purchase, the rules are retrieved and generated in order to determine the dynamic profile, for example Tuzhilin utilizes a rule which is applied to a group of men, (IF Sex="Male" and Shopping_time="evening" and Day_of_week="weekday" and Purchase="Diapers" THEN Purchase="beer".), this rule is not specific to any one individual, but instead is applied to a group of users or may be applied to a customer record based upon a number of data point, in this particular example, the data points, male, shopping time and first purchase are inserted into the heuristic rule, and the trait identified is that the user would also buy beer (Figures 4 and 6, column 3, line 58-column 4, line 29, column 5, line 47-column 6, line 44, column 8, line 20-47, column 11,

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lines 42-66). Alexander discloses a viewer profiling system which monitors a users viewing habits and internet browsing, and is able to determine demographics regarding a user, such as a users martial status, number of children, political affiliations, age, and interest in buying a car or appliance; characteristics may be determined regarding a specific user, if a user is not utilizing a specific remote or PIN, or a more general "family" profile may be determined (column 28, line 13-67, column 30, line 1-44). Therefore it would have been obvious to one skilled in the art at the time of invention to modify Davis to utilize the rules and recommendation system of Tuzhilin and viewing habits of and profiling features of Alexander in order to utilize the interaction data of Davis to determine which advertisements or webpage a user has seen and read in order to more accurately create a user profile which is tailored to a user's interests.

Regarding claims 50 and 51, Tuzhilin discloses that the rules are and profiles are probabilistic (column 4, line 30-column 5, line 45).

Regarding claims 53 and 55, Tuzhilin discloses that the profile identifies demographic and product interest characteristics of a subscriber such as age or past purchasing history (column 3, lines 31-50).

Regarding claim 54, Tuzhilin discloses that the rules predict product interest characteristics about the subscriber (column 13, lines 38-column 14, line 14).

Regarding claims 56-59 and 69-70, Alexander discloses that the user's EPG will monitor channel changes, and the programming displayed on the channel changed too, identification of advertisements on screen and column changes and the time of the channel change (column 28, lines 13-59):

Regarding claim 62, Tuzhilin discloses that subscriber's interactions are aggregated via their purchase history (column 13, line 38-column 14, line 14).

Regarding claims 63 and 64, Davis discloses aggregating subscriber interactions for single and multiple sessions to determine user interests (column 11, lines 13-33, column 12, lines 51-column 13, line 17).

Regarding claims 67 and 68, Davis discloses that the click through rate for advertising is monitored; this data is used to determine a subscribers interests (column 13, line 47-column 14, line 65).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,460,036-B1 to Herz, System and Method for Providing Customized Electronic Newspapers and Target Advertisements.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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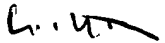
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 703-305-3234. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-308-5359.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

HBL


VICTOR R. KOSTAK
PRIMARY EXAMINER